

Appl. No. 10/607,611
Amdt. dated March 13, 2006
Reply to Office action of December 12, 2005

PATENT**REMARKS**

This paper is in response to the Office Action of December 12, 2005.

Claims 1-39 were presented for examination.

Claims 3, 11, 12, and 25-35 were withdrawn from consideration. Claims 36-39, which depend from claim 25, are also withdrawn.

Claims 13-24 were indicated to be allowable.

Claims 1, 2, and 4-10 were rejected.

Claims 1, 2, and 4-9 were rejected under 35 USC § 103(a), as being unpatentable over Beck (US 4,367,123) in view of de Larios et al. (US 6,488,040). This rejection is respectfully traversed.

The reference to de Larios et al. is owned by the same entity as the instant application. Additionally, the present application claims priority under 35 USC § 120 to de Larios et al. through U.S. Application No. 10/330, 843, as noted in the filing receipt of this application. The teachings of de Larios et al. is primarily directed toward the removal of fluids from the surface of the wafer, between a proximity head and a surface of the wafer. de Larios et al. is not concerned with plating, nor do the claims of de Larios mention plating. Additionally, one of the inventors of the present application is Mr. John de Larios. The inventors of the present application are well versed in the technology defined in de Larios, and it is submitted that the teachings presented in de Larios would not make obvious what is now claimed in the present application.

The teachings of Beck (4,367,123) are directed to applying a spot of metal on a substrate by using an electrolyte that is applied by force of gravity. The invention specifically teaches the application of the electrolyte by applying a jet of fluid onto the substrate, and excess fluid is caused to flow off of the substrate and into a tub. See, for example, Figures 1 and 2. The use of gravity allows the fluid flow to be constant and the jet allows for the fluid to focus on particular regions. However, it is important to notice that the electrolyte is not controlled, nor is there a controlled meniscus over the surface of the substrate. In fact, Beck goes to great lengths to teach ways of applying jets of fluids, via gravity, so that excess fluid is recycled once it drips, splashes and flows off of the surface of the wafer. One skilled in the art, would not have been motivated to control a meniscus on a surface for the purpose of plating, as claimed.

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To better point out the differences between the combined teachings of de Larios and Beck, the Applicants have amended claim 1, to specifically define the controlled meniscus between the proximity head and the surface of the wafer. As further claimed, the delivery and removal of fluids to and from the surface of the wafer enables a localized metallic plating when the wafer and proximity head are charged. And, the localized metallic plating is facilitated at a location of the controlled meniscus, and the controlled meniscus is capable of movement when either the proximity head or the wafer are moved. These aspects of the claimed embodiment, have now been incorporated into claim 1. Accordingly, the Applicants submit that the combined teachings of de Larios and Beck fail to teach or suggest the now claimed combination. Accordingly, the Applicants request that this rejection of claims 1, 2, and 4-9 be withdrawn.

Claims 1, 2, and 4-9 were also rejected under 35 USC § 103(a) over Beck and in view of Martens (US 6,491,764). This rejection is respectfully traversed.

The teachings provided by Martens are specifically directed to a technology area that is in contradiction to the technology area of this invention. Specifically, Martens focuses on a system that applies a fluid on the surface of the substrate, and then the fluid is spun off of the substrate with centrifugal forces. This teaching, combined with the teachings of Beck, would not suggest the controlled meniscus, now specifically claimed in independent claim 1. For at least these reasons, the Examiner is respectfully requested to withdraw this rejection and the rejection of the associated dependent claims.

The Examiner also rejected claims 1, 2, and 4-9 under a non-statutory double patenting rejection. As the Examiner is aware, this type of rejection, with regard to de Larios, is *limited to the claims* of de Larios. That is, would the "*claims*" of de Larios, when viewed in combination with the teachings of Beck, render the now claimed invention obvious? Because this type of rejection only allows the Examiner to use the "*claims*" of de Larios (and not the specification), when viewed along with Beck, the Applicants submit that an obviousness rejection cannot be made. As discussed above, de Larios did not teach plating in the '040 patent and Beck teaches a free flowing stream of fluid, that is not controlled. The combined teachings, not only lack elements, but also would not be capable of being combined to suggest each of the combined features claimed in the amended claims. For at least these reasons, the Examiner is kindly requested to withdraw the double patenting rejections of claims 1, 2 and 4-9.

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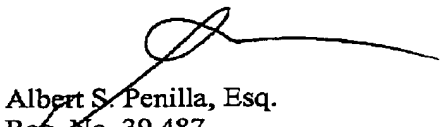
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As claims 1, 2, and 4-9 are submitted to be patentable, the Applicants submit that claim 10 is patentable, as depending from a patentable independent claim 1 (as amended).

In view of the foregoing, the Applicants respectfully request the Examiner to withdraw the rejection of claims 1, 2, and 4-10. A Notice of Allowance is therefore respectfully requested.

If the Examiner has any questions concerning the present amendment, the Examiner is kindly requested to contact the undersigned at (408) 749-6903. If any other fees are due in connection with filing this amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No LAM2P428). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
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